BRUHAT BANGALORE MAHANAGARA PALIKE

YELAHANKA ZONE

NAME OF WORK:- Detailed Estimate for the Improvements of Roads (UGD Laying Roads)and Drains in chinnappa layout, Mariyannapalya in ward No. 7 Byatarayanpura, Kodigehalli sub division

ESTIMATED COST 5000000.00

Sl No	Description of work	Unit	No	Length	Breadth	Depth	Quantity	Rate in Rs	Amount in Rs
1	Removing BS Slab of drain and stacking.						Sqm		
	(P.No.28, I.No.5.32 of PW,P&IWTD S.R 2013-14)								
	Chinnappa layout 1st main		1x2	60	1.65		198.00		
	Chinnappa layout 2nd main		1x2	180	1.65		594.00		
	cross road		2x2	46	1.65		303.60		
	3rd main		1x2	125	1.65		412.50		
	cross road		2x2	60	1.65		396.00		
	mother terasa road		1x2	145	1.65		478.50		
	mariyannapalya main road attech		1x2	57	1.65		188.10		
							2570.70	50.11	**128823.00**
	Basic Rate Rs.	46.40							
	Add 8% A.W Rs.	3.71							
	Total Rate Rs.	**50.11**							
2	Refixing stone slabs of drains and pointing in CM 1:3.						Sqm		
	(P.No.28, I.No. 5.33 of PW,P&IWTD S.R 2013-14)								
			Qty Same as I.No.1 (80%)				**2056.56**	70.04	**144037.00**
	Basic Rate Rs.	64.85							
	Add 8% A.W Rs.	5.19							
	Total Rate Rs.	**70.04**							
3	Providing granite slabs of selected quality roughly dressed and fixed in cement mortar (1:6) including fixing curing etc., complete. (7.50cms thick) (P.No.28, I.No.5.31.1 of PW,P&IWTD SR 2013-14.)	Sqm							
			Qty Same as I.No.1 (20%)				**514.14**	343.44	**176576.00**
	Basic Rate Rs.	318.00							
	Add 8% A.W Rs.	25.44							
	Total Rate Rs.	**343.44**							
4	KSRRB M300-2: Earth work excavation by manual means in Ordinary Soil involving an average horizontal throw up to 2mts and an average lift up to 0.5m, excavated surface levelled and sides neatly dressed, the disposed earth to be levelled neatly after breaking of clods complete as per specifications complete as per specifications. MORTH Chapter 3. (P.No.149, I.No.19.1 of PW,P&IWTD S.R 2013-14)						Cum		
	For Drains								
	Chinnappa layout 1st main		1x2	60	0.60	0.30	21.60		
	Chinnappa layout 2nd main		1x2	180	0.60	0.30	64.80		
	cross road		2x2	46	0.60	0.30	33.12		
	3rd main		1x2	125	0.60	0.30	45.00		
	cross road		2x2	60	0.60	0.30	43.20		
	mother terasa road		1x2	145	0.60	0.30	52.20		
	mariyannapalya main road attech		1x2	57	0.60	0.30	20.52		
							280.44	65.88	**18475.00**
	Basic Rate Rs.	61.00							

	Add 8% A.W Rs.	4.88						
	Total Rate Rs.	**65.88**						
5	KSRRB M300-52.1. Scarifying the existing granular road surface to a depth of 50mm and disposal of scarified material within all lifts and leads upto 1000 metres complete as per specifications.MORTH Specification No. 305.4.3 (P-159, Item No. 19.58 SR 2013-14)						**Sqm**	
	Chinnappa layout 1st main		1	60	6.00	360.00		
	Chinnappa layout 2nd main		1	180	6.00	1080.00		
	cross road		2	46	6.00	552.00		
	3rd main		1	125	6.00	750.00		
	cross road		2	60	6.00	720.00		
	mother terasa road		1	145	7.00	1015.00		
	mariyannapalya main road attech		1	57	6.00	342.00		
	CC road		1	45	7.00	315.00		
			1	70	4.00	280.00		
						5414.00	**16.47**	**89169.00**
	Basic Rate Rs.	15.25						
	Add 8% A.W Rs.	1.22						
	Total Rate Rs.	16.47						
6	KSRRB 300-58. Compaction of original ground with maximum of 6 passes of 8 to 10 tonnes power roller including filling in depression occuring during rolling including cost of all labour, HOM of machinery complete as per specifications. (167, I.No. 19.64)						**Sqm**	
	Chinnappa layout 1st main		1	60	6.00	360.00		
	Chinnappa layout 2nd main		1	180	6.00	1080.00		
	cross road		2	46	6.00	552.00		
	3rd main		1	125	6.00	750.00		
	cross road		2	60	6.00	720.00		
	mother terasa road		1	145	7.00	1015.00		
	mariyannapalya main road attech		1	100	6.00	600.00		
						5077.00	**4.05**	**20562.00**
	Basic Rate	**3.75**						
	Area Weightage @ 8%	**0.30**						
	Total	**4.05**						
7	KSRRB M400-17. Providing, laying, spreading and compacting graded stones aggregate to wet mix macadam specifications including pre mixing the material with water at OMC in mechanical mix plant carriage of mixed method of tipper to site, laying in uniform layers with paver in sub-base/base course on well prepared surface and compacting with vibratory roller to achieve the desired density complete as per specifications. (P. 166, Item No. 20.18)						**Cum**	
	Chinnappa layout 1st main		1	60	6.00	0.20	72.00	
	Chinnappa layout 2nd main		1	180	6.00	0.20	216.00	
	cross road		2	46	6.00	0.20	110.40	
	3rd main		1	125	6.00	0.20	150.00	
	cross road		2	60	6.00	0.20	144.00	
	mother terasa road		1	145	7.00	0.20	203.00	
	mariyannapalya main road attech		1	110	6.00	0.20	132.00	
	Basic Rate Rs.	1038.00					**1027.40**	**1121.04**	**1151756.00**
	Add 8% A.W Rs.	83.04						

	Total Rate Rs.	**1121.04**							
8	KSRRB M500-6. Providing and applying primer coat with bitumen emulsion on prepared surface of granular base including clearing of road surface and spraying primer at the rate of 0.60 kg / sqm using mechanical means complete as per specifications. (P. 171, Item No. 21.6)						**Sqm**		
	Chinnappa layout 1st main		1	60	6.00		360.00		
	Chinnappa layout 2nd main		1	180	6.00		1080.00		
	cross road		2	46	6.00		552.00		
	3rd main		1	125	6.00		750.00		
	cross road		2	60	6.00		720.00		
	mother terasa road		1	145	7.00		1015.00		
	mariyannapalya main road attech		1	110	6.00		660.00		
							5137.00	44.28	**227466.00**
	Basic Rate Rs.	41.00							
	Add 8% A.W Rs.	3.28							
	Total Rate Rs.	**44.28**							
9	KSRRB M500-18. Providing and laying semi dense bituminous concrete 25 mm thick with 100-120 TPH batch type HMP producing an average output of 75 tonnes per hour using crushed aggregates of specified grading, premixed with bituminous binder at 4.5 to 5% of mix and filler, transporting the hot mix to work site, laying with a hydrostatic paver finisher with sensor control to the required grade, level and alignment, rolling with smooth wheeled, vibratory and tandem rollers to achieve the desired compaction as per MORTH specification clause No. 500.8 complete in all respects as per specifications. with 80/100 grade bitumen using 40-60 HMP using mechanical paver (P. 174. Item No. 21.20.5						**Cum**		
	Chinnappa layout 1st main		1	60	6.00	0.025	9.00		
	Chinnappa layout 2nd main		1	180	6.00	0.025	27.00		
	cross road		2	46	6.00	0.025	13.80		
	3rd main		1	125	6.00	0.025	18.75		
	cross road		2	60	6.00	0.025	18.00		
	mother terasa road		1	145	7.00	0.025	25.38		
	mariyannapalya main road attech		1	110	6.00	0.025	16.50		
							128.43	9794.52	**1257861.00**
	Basic Rate Rs.	9069.00							
	Add 8% A.W Rs.	725.52							
	Total Rate Rs.	**9794.52**							
11	KSRB 4-1.3: Providing and laying in position **plain cement concrete of mix M7.5 with OPC cement @ 180kgs, with 40mm and down** size graded granite metal coarse aggregates @ 0.85cum and fine aggregates @ 0.57 cum machine mixed, machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. (Page - 12, Item No. 4.3) SR-2013-14						**Cum**		
	CC road		1	45	7.00	0.15	47.25		
			1	70	4.00	0.15	42.00		
							89.25	**4290.84**	**382957.00**
	Basic Rate	3973.00							
	Area Weightage @ 8%	317.84							
	Total	**4290.84**							
12	Providing and laying cement concrete using 20mm and down size granite jelly of ready mix concrete for RCC works laid in 15 cm thick layers and well compacted including vibrating curing etc., including smooth finish in CM 1:3, with all lead and lift etc., complete. (exculsive of cost of steel, fabrication and plastering charges) Ready mixed Cement concrete for Beams, Columns, Staircase and Roof with M-20 (1:1.5:3) (Cement-340 Kg/cum) (P. 19, I.No. 4.49.2) SR-2013-14						**Cum**		
	CC road		1	45	7.00	0.10	31.50		
			1	70	4.00	0.10	28.00		

							59.50	6468.12	384853.00
	Basic Rate	5989.00							
	Area Weightage @ 8%	479.12							
	Total	**6468.12**							
13	Vaccum de-watering with vaccum pump and suction mat and compaction with skin floater clubbed with floating disc including cost of generator, HOM of machinery, Screed Vibratory, Power Floater, blade and disc etc., with all lead and lift. (P. 190 I. No. 22.7) SR-2013-14						**Sqm**		
	CC road		1	45	7.00		315.00		
			1	70	4.00		280.00		
							595.00	**91.80**	**54621.00**
	Basic Rate	85.00							
	Area Weightage @ 8%	6.80							
	Total	**91.80**							
14	Providing groove cutting for width of 5mm to 10mm and depth 80mm-100mm including cost of cutting machine, generator & HOM of machinery, including cost of blade,coolant etc., including cleaning of groove & providing sand and hot bitumen fillars, and filler metal etc., including cost of conveyance of all materials, labour, lead and lift charges and all other incidental charges as per drawing and as per specifications. for concrete pavement(P. 191 I. No. 22.8.1) SR-2013-14						**Rmtr**		
			10	5.00			50.00		
							50.00	**118.80**	**5940.00**
	Basic Rate	110.00							
	Area Weightage @ 8%	8.80							
	Total	**118.80**							
15	KSRB 2-2.1 : Earthwork excavation for foundation of buildings, culverts, water supply, sanitary lines and electrical conduits either in pits or in trenches 1.5m and above in width, in ordinary soil not exceeding 1.5 m. in depth including dressing the bottom and sides of pits and trenches, stacking the excavated soil clear from edges of excavation with lead upto 50 m. after breaking of clods complete as per specifications. specification. No. KBS 2.1(a) / 2.3.5 (P. 5, I.No. 2.3) SR-2013-14						Cum		
	C.DS		5	8.00	1.80	0.90	64.80		
							64.80	151.74	**9833.00**
	Basic Rate	140.50							
	Area Weightage @ 8%	11.24							
	Total	**151.74**							
16	KSRB 4-1.2: Providing and laying in position plain cement concrete of I mix M10 With OPC cement @ 220 Kgs with 40mm and down size graded granite metal coarse aggregates @ 0.892 cum and fine aggregates @ 0.465 cum machine mixed, concrete laid in layers not exceeding 15 cms. thick, well compacted, in foundation and plinth, including cost of all materials, labour, HOM of machinery, curing complete as per specifications. Specification No. KBS 4.1, 4.2 (P. 12, I.No. 4.2) SR-2013-14						Cum		
	C.DS		5	8.00	1.80	0.15	10.80		
							10.80	4497.12	**48569.00**
	Basic Rate	4164.00							
		4164.00							
	Area Weightage @ 8%	333.12							
	Total	**4497.12**							
17	KSRB 5.2-3 : Providing and constructing granite / trap / basalt size stone masonry in foundation with cement mortar 1:6, stone hammerd dressed in courses not less than 20 cms high, bond stones at two m. apart in each course including cost of materials, labour, curing complete as per specifications.KBS 5.1.13 (P. 25, I.No. 5.6) SR-2013-14						Cum		
	C.DS		5x2	8.00	0.60	0.60	28.80		
							28.80	3549.96	**102239.00**
	Basic Rate	3287.00							
		3287.00							
	Area Weightage @ 8%	262.96							
	Total	**3549.96**							

18	KSRB 4-6.1 : Providing and removing centering, shuttering, strutting, propping etc., and removal of form work for foundations, footings, bases of columns for mass concrete including cost of all materials, labour complete as per specificaitons. Specification No. KBS 4.6.2 (P 16, I.No 4.28) SR-2013-14						Sqm		
	C.DS		5	8.00	0.60		24.00		
	Side		10	6.00	0.23		13.80		
			10	1.80	0.23		4.14		
							41.94	224.64	**9421.00**
	Basic Rate	208.00							
	Area Weightage @ 8%	16.64							
	Total	**224.64**							
19	KProviding and laying cement concrete using 20mm and down size granite jelly of ready mix concrete for RCC works laid in 15 cm thick layers and well compacted including vibrating curing etc., including smooth finish in CM 1:3, with all lead and lift etc., complete. (exculsive of cost of steel, fabrication and plastering charges)Ready mixed Cement concrete for Beams, Columns, Staircase and Roof with M-20 (1:1.5:3) (Cement-3320Kg/cum) (P. 19, I.No. 4.49.1) SR-2013-14						Cum		
	C.DS		5	8.00	1.80	0.23	16.56		
							16.56	6468.12	**107112.00**
	Basic Rate	5989.00							
		5989.00							
	Area Weightage @ 8%	479.12							
	Total	**6468.12**							
20	KSRB 4.9.2 : Providing T.M.T steel reinforcement for R.C.C work including straightening, cutting, bending, hooking, placing in position, lapping and / or welding wherever required, tying with binding wire and anchoring to the adjoining members wherever necessary complete as per design (laps, hooks and wastage shall not be measured and paid) cost of materials, labour, HOM of machinery complete as per specifications. (P. 19, I.No. 4.46) SR-2013-14						Qtl		
	C.DS		5	8.00	1.80	0.23	16.56		
							16.56		
	19.87x100Kg/Cum						**1656.00**		
							16.56	7380.72	**122225.00**
	Basic Rate	6834.00							
	Area Weightage @ 8%	546.72							
	Total	**7380.72**							
21	KSRB 15.1.3 – do – Providing ruled pointing to coursed stone masonry with cement mortar 1:3, 20mm deep, after raking joints to depth of 20mm nicely lining, including cost of materials, labour, curing complete as per specifications. (P.119.I.No. 15.3) SR-2013-14						Sqm		
	C.DS		5	8.00		0.60	24.00		
							24.00	79.92	**1918.00**
	Basic Rate	74.00							
	Area Weightage @ 8%	5.92							
	Total	**79.92**							
22	Lead for Disposal of Debris shall be payable at carage rates by Mechanical means inlcuding loading and unloading. From 0.00 to 5.00 Km (Page No.141)							Cum	
	Basic rate for haulage of materials as per item no.17.4 page 141) Rs. 2.00								
	Average weight of earth 1.28 tonne		Qty vide Item No.4+11			--	**270.00**	72.71	**19631.00**
	Basic Tate Lead Charges upto 2.00 Kms	62.20							

	2x1.28x2 =	5.12							
	Loading and unloading	67.32							
	Average Weight of earth 1.28 tone/kg for 6x1.20x2.00=12.00	5.39							
		72.71							4,91,044.00
23	KRIDL CHARGES 11%								~~550000.00~~
									4,46,640.44
24	Third party inspection charges 1%								~~50000.00~~
									270.72
25	Miscelleneous & Rounding off								~~24534.00~~
								Toatl Rs.	5000000.00
	(Rupees:- Fifty Lakhs Only)								

CERTIFICATE:

1 The work spot has been inspected me and the work is found to be necessary.
2 The estimate is prepared as per PW, P&IWTD S.R Bangalore circle for the year 2013-2014.
3 The Provisions made in the estimate are quite necessary and adequate.
4 The area comes with in the BBMP limits.

Junior Engineer
Ward No. 07

Assistant Executive Engineer
Kodigehalli Sub Division
BBMP

Executive Engineer
Byatarayanapura Division
BBMP
16/12/2013

ADMINISTRATIVELY SANCTIONED FOR Rs. 50.00 lacs
Rupees Fifty lacs Only
Under P 2178
Registered as EE ( ) No ...
Subject to conditions contained in
enclosed memo EE ( ) No .../SI...
Dt ... Estimate ... sanctioned
Addl Comm (4) AC/708/13-14
dated 23-12-2013 Rs 50,00 lacs

Addl Commissioner
(Yelahanka Zone)
BBMP, Bengaluru-92

Technical Sanction for Rs. 50.00 lakhs
Fifty lakhs only
under P2178.
registered as EE No: .../... Subject
to conditions contained enclosed memo.
No: 256/13-14 Dt. 26/12/13

AE/JE ... (TP Div.)